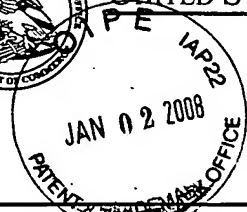




UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov



APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/531,660

04/15/2005

Luis Molina

11299.105005

3876

20786

7590

12/28/2007

KING & SPALDING LLP
1180 PEACHTREE STREET
ATLANTA, GA 30309-3521

EXAMINER

CORDERO GARCIA, MARCELA M

ART UNIT

PAPER NUMBER

1654

MAIL DATE

DELIVERY MODE

12/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/531,660

Applicant(s)

MOLINA, LUIS

Examiner

Marcela M. Cordero Garcia

Art Unit

1654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>02/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-11 are pending in the application.

Election/Restrictions

Applicant's election with traverse of the species: duramycin (lanbiotic), saline solution (pharmaceutical carrier) and topical administration (mode of administration) in the reply filed on 8/27/07 is acknowledged. The traversal is on the ground(s) that the Examiner did not provide a reason that it would be an additional burden to the office to search for different lanbiotic species, different pharmaceutically acceptable carriers or modes of administration. Applicant also points out that, even though Examiner has stated that these are not "so linked as to form a single inventive concept" and that these are not "art recognized equivalents" (citing PCT Rule 13.2 and PCT Administrative Instructions, Annex B, part I(f)(i)(B)(2)). However, the Applicant notes that the 'general inventive concept' is that which is claimed in the independent claim, i.e., a method of treating dry eye disease by administering a therapeutically effective amount of a lanbiotic in a pharmaceutically acceptable carrier. This is not found persuasive because the international search report (ISR) of PCT/US03/29853 does indicate three Y references with respect to all the claims, therefore, the invention is not linked by a special technical feature. In addition, with respect to the lanbiotics, the compounds are drawn to many materially different compounds drawn to different compositions, which require different searches. Additionally, the carriers and mode of administration have

materially different effects and do also require different searches and consideration. The search for each of the above inventions is not co-extensive particularly with regard to the literature search. Further, a reference which would anticipate one species of the invention would not necessarily anticipate or even make obvious another species of the instant invention. Finally the consideration for patentability is different in each case. Thus, it would be an undue burden to examine all of the above species in one application. Because these species are distinct for the reasons given above and the search required for each species is not necessarily required for the other species, election of species for examination purposes as indicated is proper.

The requirement is still deemed proper and is therefore made FINAL.

Claims 1-11 are presented for examination on the merits as they read upon the species: a method of treating dry eye disease comprising administering to a subject in need of such treatment a therapeutically effective amount of duramycin in a saline solution via topical administration.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (US 5,811,446) in view of Blackburn et al. (US 4,980,163).

Thomas teaches a method of treating blepharitis (eyelid bacterial inflammation which reads upon “dry eye disease”) [e.g., column 1, line 39; column 5, lines 1-27] comprising administering to a subject in need of such treatment a therapeutically effective amount of a broad range antibiotic (e.g., column 3, line 24) and a saline solution carrier (e.g., column 9, line 18) via topical administration (e.g., column 9, lines 50-53; column 10, lines 30-36). Thomas also teaches antibiotic compositions acting preferably against *Staphylococcus sp*, specially, e.g., *S. aureus* (column 5, lines 1-18). The limitation of claim 3: --wherein said administering involves topical administration—is taught, e.g., in column 10, lines 30-36. The limitation of claim 4: --wherein said topical administration is via a carrier vehicle selected from a group consisting of drops of liquid, liquid washes, gels, ointments, sprays and liposomes—e.g., column 9, lines 50-53; column 10, lines 17-29. The limitation of claim 5: --wherein said topical administration comprises infusion of said compound to said ocular surface via a device selected from a group consisting of a pump-catheter system, a continuous or selective release device and a contact lens—is taught, e.g., in column 9, lines 50-53. The limitation of claim 6: --wherein said administering is systemic administration of said compound—is taught, e.g., in column 10, lines 39-40. The limitation of claim 8: --administration of an oral form of said compound such that a therapeutically effective amount of said compound contacts lacrimal tissues of said subject via systemic absorption and circulation—is taught, e.g., column 10, lines 55-60. The limitation of

claim 9: --administration of an injectable form of said compound, such that a therapeutically effective amount of said compound contacts lacrimal tissues of said subject via systemic absorption and circulation-- is taught, e.g., in column 10, lines 37-40. The limitation of claim 11: --administration of an intra-operative instillation of a gel, cream, powder foam, crystals, liposomes, spray or liquid suspension form of said compound, such that a therapeutically effective amount of said compound contacts the lacrimal tissues of said subject via systemic absorption and circulation-- is taught, e.g., column 10, lines 17-29.

Thomas does not teach the broad range antibiotic duramycin.

Blackburn et al. teach broad range antibiotic compositions (e.g., abstract) comprising duramycin (e.g., claim 1 and 9) which target *S. aureus* (e.g., claim 19). The limitation of claim 2: --wherein the antibiotic is duramycin-- is taught, e.g., in claim 9 of Blackburn et al. The limitation of claim 3: --wherein said administering involves topical administration—is taught, e.g., in column 3, lines 44-48. The limitation of claim 4: --wherein said topical administration is via a carrier vehicle selected from a group consisting of drops of liquid, liquid washes, gels, ointments, sprays and liposomes—is taught, e.g., in column 3, lines 44-47 and column 4, lines 10-15. The limitation of claim 6: --wherein said administering is systemic administration of said compound—is taught, e.g., in column 3, lines 44-48. The limitation of claim 8: --administration of an oral form of said compound such that a therapeutically effective amount of said compound contacts lacrimal tissues of said subject via systemic absorption and circulation—is taught, e.g., column 3, line 7. The limitation of claim 11: --administration of an intra-

operative instillation of a gel, cream, powder foam, crystals, liposomes, spray or liquid suspension form of said compound, such that a therapeutically effective amount of said compound contacts the lacrimal tissues of said subject via systemic absorption and circulation-- is taught, e.g., column 3, lines 44-48.

The limitation of claim 7: --wherein said systemic administration involves administration of a nebulized liquid to oral or nasopharyngeal airways of said subject-- such that a therapeutically effective amount of said compound contacts lacrimal tissues of said subject via systemic absorption and circulation-- and the limitation of claim 10: --administration of a suppository form of said compound, such that a therapeutically effective amount of said compound contacts lacrimal tissues of said subject via systemic absorption and circulation--are not expressly taught by either reference.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Thomas by using a broad range antibiotic composition comprising duramycin as taught by Blackburn et al. The skilled artisan would have been motivated to do so because Thomas teaches using a broad range antibiotic (e.g., column 3, line 24) in the method of treating blepharitis (column 1, line 39; column 5, lines 1-27), and the duramycin antibiotic composition taught by Blackburn is a broad range antibiotic (e.g., claims 1 and 9). There would have been a reasonable expectation of success, given that both Thomas and Blackburn teach that the antibiotic compositions are preferably effective against *Staphylococcus aureus* (e.g., column 5, lines 1-18 of Thomas, claim 19 of Blackburn et al.) that can be topically administered (e.g., column 3, lines 44-48 of Blackburn et al. and column 10, lines 30-36 of Thomas).

The adjustment of particular conventional working conditions (e.g., using other forms of administration, such as nebulization or suppositories) is deemed merely a matter of judicious selection and routine optimization that is well within the purview of the skilled artisan. As such, it would have been obvious to one skilled in the art at the time of invention to determine all optimum and operable conditions (e.g., suitable modes of administration), because such conditions are art-recognized result-effective variables that are routinely determined and optimized in the art through routine experimentation (“[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.”. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). See MPEP 2145.05). One would have been motivated to determine all optimum and operable conditions in order to achieve the highest yield of the highest purity product in the most efficient manner. One would have had a reasonable expectation for success because such modifications are routinely determined and optimized in the art through routine experimentation.

From the teaching of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-11 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8 of copending Application No. 11/123,436. The instantly claimed invention and the invention claimed in Application '436 are both drawn to a method of treating dry eye disease (claim 1 of Application '436 is drawn to treating allergies and oculosystemic diseases, which read upon dry eye disease) comprising duramycin. Further, the instantly claimed method encompasses and/or is encompassed by the claimed method of Application '436

This is a provisional obviousness-type double patenting rejection.

Conclusion

No claim is allowed.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcela M. Cordero Garcia whose telephone number is (571) 272-2939. The examiner can normally be reached on M-Th 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia J. Tsang can be reached on (571) 272-0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Marcela M Cordero Garcia
Patent Examiner
Art Unit 1654



PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 5

Complete if Known

Application Number	10/531,660
Filing Date	April 15, 2005
First Named Inventor	Luis Molina
Group Art Unit	1654
Examiner Name	Marcela M. Cordero Garcia
Attorney Docket Number	11299.105005 L1 3000 MMII/2

4005632 1.DOC

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code (if known)			
/MMCG	AA	4,209,505	A	Mikhail	06-24-1980	
	AB	5,137,728	A	Bawa	08-11-1992	
	AC	5,512,269	A	Molina y Vedia <i>et al.</i>	04-30-1996	
	AD	5,641,781	A	Cuberes-Altisent, <i>et al.</i>	06-24-1997	
	AE	5,651,957	A	Molina y Vedia <i>et al.</i>	07-29-1997	
	AF	5,683,675	A	Molina y Vedia <i>et al.</i>	11-04-1997	
	AG	5,716,931	A	Molina y Vedia <i>et al.</i>	02-10-1998	
	AH	5,849,706	A	Molina y Vedia <i>et al.</i>	12-15-1998	
	AI	5,900,407	A	Yerxa <i>et al.</i>	05-04-1999	
	AJ	5,968,913	A	LaCroix, <i>et al.</i>	10-19-1999	
	AK	5,972,988	A	Macias	10-26-1999	
	AL	5,981,473	A	Barefoot <i>et al.</i>	11-09-1999	
	AM	6,027,715	A	Poznelo	02-22-2000	
	AN	6,043,219	A	Iandolo <i>et al.</i>	03-28-2000	
	AO	6,136,794	A	Cook <i>et al.</i>	10-24-2000	
	AP	6,159,952	A	Shaffer <i>et al.</i>	12-12-2000	
	AQ	6,200,551	B1	Morgan	03-13-2001	
	AR	6,221,357	B1	Bok <i>et al.</i>	04-24-2001	
	AS	6,268,380	B1	Tjoeng <i>et al.</i>	07-31-2001	
	AT	6,277,855	A	Yerxa	08-21-2001	
	AU	6,291,469	B1	Fisher <i>et al.</i>	09-18-2001	
	AV	6,315,996	B1	O'Callaghan	11-13-2001	
	AW	6,319,908	B1	Yerxa <i>et al.</i>	11-20-2001	
	AX	6,331,529	B1	Yerxa <i>et al.</i>	12-18-2001	
	AY	6,348,589	B1	Pendergast <i>et al.</i>	02-19-2002	
	AZ	6,387,886	B1	Montgomery <i>et al.</i>	05-14-2002	
	AAA	6,420,347	B1	Jacobus <i>et al.</i>	07-16-2002	
	AAB	6,423,694	B1	Drutz <i>et al.</i>	07-23-2002	
	AAC	6,423,721	B1	Harris <i>et al.</i>	07-23-2002	
	AAD	6,444,695	B1	Mahajan <i>et al.</i>	09-03-2002	
	AAE	6,448,276	B1	Yerxa	09-10-2002	
	AAF	6,451,288	B1	Boucher <i>et al.</i>	09-17-2002	
/MMCG	AAG	6,462,028	B2	Pendergast <i>et al.</i>	10-08-2002	

Examiner
Signature

/Marcela M Cordero Garcia/

Date
Considered

12/20/2007

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.


¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.


Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
Application Number		10/531,660			
Filing Date		April 15, 2005			
First Named Inventor		Luis Molina			
Group Art Unit		1654			
Examiner Name		Marcela M. Cordero Garcia			
Attorney Docket Number		11299.105005 L1 3000 MIMI/2			
Sheet	2	of	5		

4005632 1.DOC

U.S. PATENT DOCUMENTS						
Examiner Initials °	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD- YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code (if known)			
<div>/MMCG/</div> <div></div> <div>/MMCG/</div>	BA	6,489,335	B2	Peyman	12-03-2002	
	BB	6,548,658	B2	Yerxa	04-15-2003	
	BC	6,565,861	B1	Tiffany <i>et al.</i>	05-20-2003	
	BD	6,569,903	B2	Honma <i>et al.</i>	05-27-2003	
	BE	6,596,725	B2	Peterson <i>et al.</i>	07-22-2003	
	BF	6,656,920	B2	Fox <i>et al.</i>	12-02-2003	
	BG	6,673,779	B2	Jacobus <i>et al.</i>	01-06-2004	
	BH	6,693,109	B2	Fisher <i>et al.</i>	02-17-2004	
	BI	2004-0033955	A1	Catania <i>et al.</i>	02-19-2004	
	BJ	6,713,458	B1	Yerxa <i>et al.</i>	03-30-2004	
	BK	6,716,813	B2	Lim <i>et al.</i>	04-06-2004	
	BL	2005-0506282	A1	Molina	11-10-2005	

FOREIGN PATENT DOCUMENTS								
Examiner Initials *	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD- YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T 6
		Office ²	Number	Kind Code ³ (if known)				
/MMCG/	BM	JP	2002-053492	A2	Santen Pharm.; Inspire Pharm.	02-19-2002		
	BN	WO	94/28726	A2	Wellcome Found.; U. No. Carol.	12-22-1994		
	BO	WO	98/34593	A1	Inspire Pharmaceuticals	08-13-1998		
	BP	WO	99/09998	A1	Inspire Pharmaceuticals	03-04-1999		
	BQ	WO	01/80844	A2	Inspire Pharmaceuticals	11-01-2001		
	BR	WO	01/87288	A2	Inspire Pharmaceuticals	11-22-2001		
	BS	WO	01/87913	A2	Inspire Pharmaceuticals	11-22-2001		
	BT	WO	02/09702	A2	Inspire Phar., U. Compl. Madrid	02-07-2002		
	BU	WO	02/16381	A2	Inspire Phar., U. No. Carolina	02-28-2002		
/MMCG/	BV	WO	04/037167	A2	Molichem Medicines, Inc.	05-06-2004		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
/MMCG/	BW	BAUDOUIN, C., "The Pathology of Dry Eye," <i>Surv. Ophthalmol.</i> 45 Suppl. 2: S211-S220 (March 2001)	

Examiner Signature	/Marcela M Cordero Garcia/	Date Considered	12/20/2007
--------------------	----------------------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

3

of

5

Complete if Known

Application Number	10/531,660
Filing Date	April 15, 2005
First Named Inventor	Luis Molina
Group Art Unit	1654
Examiner Name	Marcela M. Cordero Garcia
Attorney Docket Number	11299.105005 L1 3000 MMI/2

4005632 1.DOC

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 6
/MMCG	CA	BOSCHELLI, D.H., et al., "Inhibition of E-selectin-, ICAM-1-, and VCAM-1-mediated cell adhesion by benzo[b]thiophene-, benzofuran-, indole-, and naphthalene-2-carboxamides: identification of PD 144795 as an antiinflammatory agent," <i>J. Med. Chem.</i> , 38(22):4597-4614 (October 27, 1995).	
	CB	BOUCHER, R., et al., "Mechanisms and therapeutic actions of uridine triphosphates in the lungs," <i>Adenosine and Adenine Nucleotides: From Molecular Biology to Integrative Physiology</i> , (L. Belardelli, et al., Eds., Alunwer Academic Publishers, Boston, 1995), pp. 525-532.	
	CC	BOWIE, E.M., et al., "Corticosteroids, central serous chorioretinopathy, and neurocysticercosis," <i>Arch. Ophthalmol.</i> , 122(2):281-283 (February 2004).	
	CD	BREWITT, H., et al., "Dry Eye Disease: The Scale of the Problem." <i>Surv. Ophthalmol.</i> 45 Suppl. 2: S199-S202 March 2001).	
	CE	CHANG, Y.H., et al., <i>Eur. J. Pharmacol.</i> , 69(2):155-164 (January 16, 1981). Effects of pharmacologic agents on the reversed passive Arthus reaction in the rat.	
	CF	CLOUTIER, M.M., et al., "Duramycin enhances chloride channel activity in cystic fibrosis nasal epithelial cells." <i>Pediatric Pulmonology</i> , 2(Supplement):99 (Abstract 15) (1988).	
	CG	CLOUTIER, M.M., et al., "Duramycin enhances chloride secretion in airway epithelium." <i>Am J Physiol. - Cell Physiol.</i> , Sep;259(3 Pt 1):C450-C454 (September 1990).	
	CH	DE NIJS, E., et al., "The adverse effects of corticosteroids in central serous chorioretinopathy" <i>Bull. Soc. Belge Ophthalmol.</i> , 289:35-41 (2003).	
	CI	DIAMOND, M.S., et al., "The dynamic regulation of integrin adhesiveness" <i>Current Biology</i> , 4(6):506-517 (June 1, 1994).	
	CJ	FORREST, J.B., et al., "Activation of nasal cilia in immotile cilia syndrome," <i>Am. Rev. Respir. Dis.</i> , 120(3):511-515 (September 1979).	
	CK	FOULKS, G.N., "The evolving treatment of dry eye," <i>Ophthalmol. Clin. North Am.</i> , 16(1):29-35 (March 2003).	
	CL	FRIEDLANDER, A.H., et al., "Late-life depression: psychopathology, medical interventions, and dental implications," <i>Oral Surg. Oral Med. Oral Pathol. Oral Radiol. Endod.</i> , 94(4):404-412 (October 2002).	
	CM		
	CN	GROSS, E., et al., "Subtilin, VI: Die Struktur des Subtilins," <i>Z. Physiol. Chem.</i> , 354:810-812 (July 1973).	
✓	CO	HAYASHI, F., et al., "The structure of PA48009: The revised structure of duramycin," <i>J. Antibiotics (Tokyo)</i> , LXIII(11):1421-1430 (November 1990).	
/MMCG	CP	HÉCHARD, Y., et al., "Mode of action of modified and unmodified bacteriocins from Gram-positive bacteria," <i>Biochimie</i> , 84(5-6):545-557 (May-June 2002).	

Examiner
Signature

/Marcela M Cordero Garcia/

Date

Considered

12/20/2007

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 4 of 5

Complete if Known

Application Number	10/531,660
Filing Date	April 15, 2005
First Named Inventor	Luis Molina
Group Art Unit	1654
Examiner Name	Marcela M. Cordero Garcia
Attorney Docket Number	11299.105005 L1 3000 MML/2

4005632 1.DOC

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
/MMCG/	DA	KELLERMAN, D.J., "P2Y ₂ Receptor agonists: a new class of medication targeted at improved mucociliary clearance," <i>Chest</i> , 121(5 Suppl.):201S-205S (May 2002).	
	DB	KELLNER, R., et al., "Gallidermin: a new lanthionine-containing polypeptide antibiotic," <i>Eur. J. Biochem.</i> 177(1), 53-59 (October 15, 1988).	
	DC	KESSLER, H., et al., "204. The structure of the polycyclic nonadecapeptide Ro 09-0198," <i>Helv. Chim. Acta</i> , 71:1924-1929 (1988).	
	DD	KETTENRING, J.K., et al., "Sequence determination of actagardine, a novel lantibiotic, by homonuclear 2D NMR spectroscopy," <i>J. Antibiotics</i> , XLIII(9):1082-1088 (September 1990).	
	DE	KISHIMOTO, T.K., et al., "Integrins, ICAMs, and selectins: role and regulation of adhesion molecules in neutrophil recruitment to inflammatory sites," <i>Adv. Pharmacol.</i> , 25:117-169 (1994).	
	DF	KNOWLES, M.R., et al., "Activation by extracellular nucleotides of chloride secretion in the airway epithelia of patients with cystic fibrosis," <i>N. Eng. J. Med.</i> , 325(8):533-538 (August 22, 1991).	
	DG	LANSLEY, A.B., et al., "Control of the beat cycle of respiratory tract cilia by Ca ²⁺ and cAMP," <i>Am. J. Physiol.</i> , 263(2 Pt. 1):L232-L242 (August 1992).	
	DH	LETHEM, M.L., et al., "Nucleotide regulation of goblet cells in human airway epithelial explants: normal exocytosis in cystic fibrosis," <i>Am. J. Respir. Cell. Mol. Biol.</i> , 9(3):315-322 (September 1993).	
	DI	McNULTY, M.J., et al., "Pharmacokinetics and tissue distribution of the nonadecapeptide Moli1901 in rats and mice," <i>Xenobiotica</i> , Feb;33(2):197-210 (February 2003).	
	DJ	MONNET, D., et al., "Ophthalmic findings and frequency of extraocular manifestations in patients with HLA-B27 uveitis: a study of 175 cases," <i>Ophthalmology</i> , 111(4):802-809 (April 2004).	
	DK	MUSZA, L.L., et al., "Potent new cell adhesion inhibitors from the root of <i>trichilia rubra</i> ," <i>Tetrahedron</i> , 50(39):11369-11378 (1994).	
	DL	NAKAMURA, S., et al., "Inhibitory effect of duramycin on partial reactions catalyzed by (Na ⁺ ,K ⁺)-adenosinetriphosphatase from dog kidney," <i>Biochem.</i> , 23(2):385-389 (January 17, 1984).	
	DM	NUSSENBLATT, R.B., et al., "Cyclosporine: immunology, pharmacology and therapeutic uses," <i>Survey of Ophthalmology</i> , 31(3):159-169 (November-December 1986).	
	DN	O'NEIL, M.J., Sr. Ed., et al., <i>The Merck Index: An Encyclopedia of Chemicals, Drugs, and Biologicals</i> , 13 th Ed., O'Neil, M.J. Sr. Ed. (Merck & Co., Inc., Whitehouse Station, New Jersey, 2001), entry no. 2781 ("Cyclosporin A"), p. 480.	
	DO	PEDERSEN, M., "Ciliary activity and pollution," <i>Lung</i> , 168 Suppl.:368-376 (1990).	
✓	DP	PRIDHAM, T.G., et al., "Antibiotics against plant disease. II. Effective agents produced by streptomyces cinnamomeus forma azacoluta F. Nov.," <i>Phytopathology</i> , 46:575-581 (October 1956)	
/MMCG/	DQ	ROBERTS, M., et al., "Stimulation of sodium transport by duramycin in cultured human colonic epithelia," <i>J. Pharmacol. Exp. Ther.</i> , 259(3):1050-1058 (December 1991).	

Examiner
Signature

/Marcela M Cordero Garcia/

Date

Considered

12/20/2007

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known			
		Application Number	10/531,660		
		Filing Date	April 15, 2005		
		First Named Inventor	Luis Molina		
		Group Art Unit	1654		
		Examiner Name	Marcela M. Cordero Garcia		
Sheet	5	of	5	Attorney Docket Number	11299.105005 L1 3000 MMI/2

4005632 1.DOC

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
/MMCG/	EA	SAHL, H.-G., "Influence of the staphylococcinlike peptide Pep 5 on membrane potential of bacterial cells and cytoplasmic membrane vesicles," <i>J. Bacteriol.</i> , 162(2):833-836 (May 1985).	
	EB	SANFILIPPO, P.J., <i>et al.</i> , "Novel thiazole based heterocycles as inhibitors of LFA-1/ICAM-1 mediated cell adhesion," <i>J. Med. Chem.</i> , 38(7):1057-1059 (March 31, 1995).	
	EC	SCHALENBOURG, A., <i>et al.</i> , "Corticosteroid-induced central serous chorioretinopathy in patients with ocular inflammatory disorders," <i>Klinische Monatsblätter für Augenheilkunde</i> , 219(4):264-267 (April 2002).	
	ED	SCHNELL, N., <i>et al.</i> , "Prepeptide sequence of epidermin, a ribosomally synthesized antibiotic with four sulphide-rings," <i>Nature</i> , 333(6170):276-278 (May 19, 1988).	
	EE	SHOTWELL, O.L., <i>et al.</i> , "Antibiotics against plant disease. III. Duramycin, a new antibiotic from <i>Streptomyces cinnaomoeus</i> forma <i>azacoluta</i> ," <i>J. Am. Chem. Soc.</i> 80:3912-3915 (August 5, 1958)	
	EF	SPRINGER, T.A., "Adhesion receptors of the immune system," <i>Nature</i> , 346(6283):425-434 (August 2, 1990).	
✓	EG	WAKAMIYA, T., <i>et al.</i> , "The structure of ancovenin, a new peptide inhibitor of Angiotensin I Converting Enzyme," <i>Tetrahedron Lett.</i> , 26(5):665-668 (1985).	
/MMCG/	EH	WANDEL, T., <i>et al.</i> , "Glaucoma treatment with once-daily levobunolol," <i>Amer. J. Ophthalmol.</i> , 101(3):298-304 (March 15, 1986).	

Examiner Signature	/Marcela M Cordero Garcia/	Date Considered	12/20/2007
--------------------	----------------------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Notice of References Cited	Application/Control No. 10/531,660	Applicant(s)/Patent Under Reexamination MOLINA, LUIS	
	Examiner Marcela M. Cordero Garcia	Art Unit 1654	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-4,980,163	12-1990	Blackburn et al.	424/94.63
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

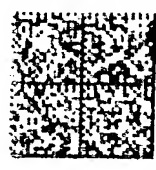
*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Organization USPTO Bldg/Room REMSEL
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
If Undeliverable Return in Ten Days

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

AN EQUAL OPPORTUNITY EMPLOYER

U.S. OFFICIAL MAIL
PENALTY FOR
PRIVATE USE
\$01.31⁰
36.4204-1/9 DEC 23 2007
MAILED FROM ZIP CODE 22314



RECEIVED
JAN 02 2008
USPTO MAIL CENTER